



29 August 2019

To: Regulations.gov Docket #: FMCSA-2018-0037

Subject: SAE International's Comments to the Advanced Notice of Proposed Rulemaking: Safe Integration of Automated Driving Systems-Equipped Commercial Motor Vehicles

SAE International, a global voluntary consensus mobility standards development organization, appreciates this opportunity to respond to the request for comments.

The National Technology Transfer and Advancement Act (NTTAA) directs Federal agencies to adopt voluntary consensus standards wherever possible thus avoiding development of unique government standards. OMB Circular A-119, revised by the Office of Management and Budget (OMB) in January 2016, spells out the government strategy for standards development promoting agency participation with standards bodies. US DOT subject matter experts from the modal administrations participate in many of the SAE ground vehicle standards committees. SAE committees include experts from industry, academia, research organizations and government. The resources and input each sector provide is beneficial to both the process and the products. US DOT referenced scores of SAE standards and documents in the guidance documents "Automated Driving Systems 2.0 -A Vision for Safety" and "Automated Vehicles 3.0 – Preparing for the Future of Transportation". Having government participation, and in this subject area of automated vehicles, FMCSA staff, in the standards committees is encourage by the SAE membership.

SAE standards committee members have a long history of developing voluntary consensus standards that have been incorporated by reference into legislation, rulemaking documents, and regulations. SAE ground vehicle standards are cited in the US Department of Transportation's (USDOT) National Highway Traffic Safety Administration's and Federal Motor Carrier Safety Administration's regulations. States, Commonwealths, the District of Columbia, Tribal Nations, and US Territories also incorporate SAE International standards in their regulations. A ubiquitous and mature standard: "Motor Vehicle License Plates", SAE J686™. In an emerging, developing area an example of a SAE publication that is globally adopted and is used to define terms in this ANPRM is SAE J3016_201806™, "Taxonomy and Definitions for Terms Related to Driving Automation Systems for On-Road Motor Vehicles".

Since the first motor vehicles of the 19th century, technology has continually advanced improving many aspects of vehicle performance, most importantly

vehicle, safety and efficiency, all while reducing impacts to the environment. Advancing safe mobility, through safer vehicles, systems, and operation is the top priority of SAE members. New SAE Standards are continually developed, published and adopted. Existing standards, an example being SAE J3016™ cited above, are revised and reissued to encompass the latest emerging technologies and advancements. The history thus far of this document is that J3016_201401™ was originally published in January 2014. It was revised and published in September of 2016 as SAE J3016_201609™ (which was referenced in “Automated Driving Systems 2.0 – A Vision for Safety”), and the current version is SAE J3016_201806™, which is referenced in US DOT’s AV 3.0; however, this version of the standard is continually discussed for future revisions by the SAE On-Road Automated Driving Committee.

The technologies of advanced driver assistance systems, vehicle communications, cybersecurity, automated driving systems, enabling mobility for the disabled, and autonomous vehicles are continually being advanced, and in certain cases, applications, hardware, and software are being invented, or even conceived yet. While the inquiry focuses on passenger cars, SAE committees are working on the full range of on-road vehicles: Micromobility, Motorcycles, Automobiles, Light-, Medium-, and Heavy-Duty Trucks, Buses, and Motor Coaches. SAE standards development is agile, and the members maintain the standards to be current encompassing technology advancements.

The Federal Motor Carrier Safety Regulations (FMCSR) and the Federal Motor Vehicle Safety Standards (FMVSS) are regulations that incorporate SAE International voluntary consensus standards where practical and appropriate. These SAE standards are recommended practices that define terms, definitions and nomenclature, describe test procedures, detail functional requirements, performance standards, configuration/geometry, and testing tools. The standards committees regularly review the documents and update as technology advances.

When SAE standards, or standards from other organizations, are incorporated into a regulation, this is done at the point the regulation is promulgated with the version of the standards at that moment. The regulation is rarely modernized or updated to reflect any changes to referenced standards or advances in technology.

SAE has, is, and will continue to work with USDOT modal administrations, along with other Federal agencies, in accordance with the NTTAA and OMB Circular A-119, but encourages the USDOT, perhaps working with the Congress of the United States, to develop timely processes to revise the references, bringing the regulations up to date when this is beneficial to the public or to industry, particularly when the modernization improves safety or productivity. In addition,

Section V of the ANPRM explains the role of US DOT regarding vehicle automation and states that the FMCSA would rely on the National Highway Traffic Safety Administration (NHTSA) to establish Federal standards. SAE International suggests that the FMCSA should rely on NHTSA to establish

Federal Regulations or revise such, while referencing SAE standards along with other open consensus standards organizations' documents where appropriate.

SAE would welcome the opportunity to brief FMCSA leadership and staff subject matter experts regarding the current works in progress and published standards relating to driver assistance, automated driving systems, several of which address, or will address, or contribute to answers to questions put forth in the ANPRM. Conversely, input from FMCSA regarding priorities, needs and gap analysis would be valuable to the committees so that their products, being published open consensus standards, can be incorporated in USDOT policy and regulations expeditiously.

Developing standards, especially those that might be referenced by governments, whether the Federal Government, states, municipal or international entities, is what SAE members have been doing for decades. The process of convening subject matter technical experts and stakeholders to collaborate openly, to determine needs, achieve consensus on content of standards, and then publishing and disseminating the results of these efforts is a core competency of SAE International.

Thank you for this opportunity to comment on this ANPRM.

Sincerely,



S. William Gouse
Director, Federal Program Development

SAE INTERNATIONAL
901 15th Street, NW
Suite 520
Washington, DC 20005

m +1.202.281.5844
e S.William.Gouse@sae.org
www.sae.org